

Claims 20-22 and 34 have been made dependent upon claim 12.

Claims 25-30 which were withdrawn from consideration have been amended so that they depend ultimately from claim 12. These amended claims should now be considered as part of the elected species.

Claims 31 and 33 have been cancelled as redundant.

Claim 73 has been amended for consistency with other claims that depend from claim 67 to recite that the alkyl groups have "about 12 to about 22 carbon atoms. This amendment corrects a clerical error and is not intended to change the scope of the claim.

New claims 93-97 are fully supported by claims 20-22 and 34. New claims 98-103 are fully supported by claims 25-30.

New claims 98-103 are similar to original claims 25-30, except that they have been made dependent on claim 15. These claims should be considered as part of the elected species.

The Rejections

Claims 67-93 are rejected as containing subject matter that was not described in the application as filed. The Examiner refers to the recitation "about 22 carbon atoms" which is alleged to be new matter. Applicants respectfully traverse this rejection.

Applicants direct the Examiner's attention to page 20 of the specification to the definitions of X_1 , X_2 and X_4 which all include the recitation "from 2 to about 22 carbon atoms." Applicants also direct the Examiner's attention to page 22 of the specification at lines 21 and 22 where X_1 , X_2 and X_4 groups of Formula IX are defined as the same as those of Formula VIII on page 20.

Thus the recitation "from 2 to 22 carbon atoms" in the definitions of X groups of claims 67 and 81 is literally supported in the application as filed. This rejection should be withdrawn.

Claims 12-22, 31-35 65 and 66 are rejected as indefinite. Claims 65 and 66 have been canceled obviating the rejection with respect to these claims. Applicants traverse this rejection with respect to the remaining claims.

The Examiner states that the use of the term "repeating structure" of these claims conflicts with the limitation on m that it can be 1 or 0 dependent upon the structure of Z. The Examiner alleges that the use of the term "repeating structure implies that the structure is repeated identically. Applicants disagree and believe that the claims as written clearly state that the structure $Z-(R)_m$ is repeated and that there is variation in the value of m in the different units. In any event, Applicants have deleted the term "repeating" which is believed to obviate this rejection. The amendment of claims 12 and 15 to remove the word "repeating" is not intended to narrow the scope of these claims.

Claims 20, 21, 34, 65, and 66 are rejected as anticipated by Alanaine-Glycine -containing peptides of the 1990 Sigma Catalog. Claims 65 and 66 have been cancelled. Claims 20 21 and 34 have been amended to depend from claim 12. Claim 12 was not cited in this rejection and is believed to be free of the cited prior art. The amendments obviate this rejection.

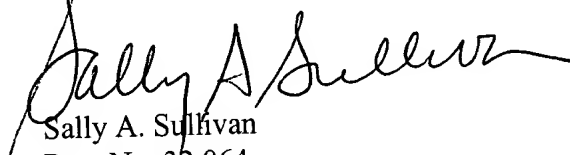
Claims remaining in this case are believed to be free of the art. New claims 93-97 depend from claim 15 which is believed to be free of the prior art.

CONCLUSION

This application appearing to be in condition for allowance, passage to issuance is respectfully requested.

This amendment is accompanied by a Petition for Extension of Time of one month and check in the amount of \$110. No fees for additional claims are believed to be due. If the enclosed amount is incorrect, please charge any deficiency or credit any overpayment to deposit account 07-1969.

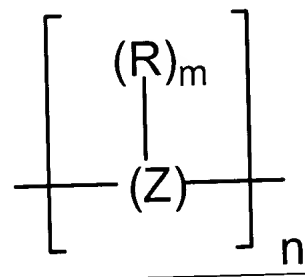
Respectfully submitted,


Sally A. Sullivan
Reg. No. 32,064

Greenlee, Winner and Sullivan, P.C.
5370 Manhattan Circle, Suite 201
Boulder, CO 80303
Telephone: (303) 499-8080
Facsimile: (303) 499-8089
Email: winner@greenwin.com
Attorney docket no. 45-93A
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MARKED-UP CLAIMS

12. [A compound according to claim 65 where Z is a basic amino acid.] A compound with the structure:



and salts thereof, where:

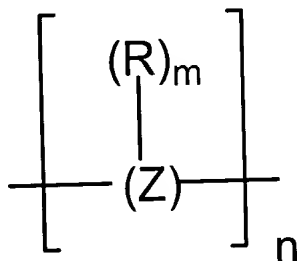
n is an integer ranging from 2 to about 2,000;

m is either 0 or 1, provided that m is 1 at least once in the compound and m is zero at least once in the compound when Z is an amino acid;

R is R_A or R_B, where R_A is C₁₋₂₃ alkyl or alkenyl and R_B is a steroid selected from the group consisting of stigmasterol, ergosterol and cholic acid; and

Z is a basic amino acid wherein Z groups are linked by peptide bonds.

15. [A compound according to claim 65 where Z is a sugar having from 3 to about 7 carbon atoms.] A compound with the structure:



and salts thereof where:

n is an integer ranging from 2 to about 2,000;

m is either 0 or 1;

R is R_A or R_B, where R_A is an alkyl or alkenyl group having 12 to 22 carbon atoms and R_B is a steroid selected from the group consisting of stigmasterol, ergosterol and cholic acid; and

Z is a monosaccharide having from 3 to 7 carbon atoms wherein Z groups are linked by glycosidic bonds.

20. A composition for transfecting a cell with a nucleic acid which comprises a nucleic acid and one or more compounds according to claim [65] 12.
21. A lipid aggregate which comprises one or more compounds of claim [65] 12.
22. A method for transfecting a cell comprising the step of contacting the cell with a lipid aggregate comprising a nucleic acid and one or more compounds according to claim [65] 12.
25. A composition for transfecting a cell with a nucleic acid which comprises a cationic lipid of claim [1] 12 capable of complexing said nucleic acid to be transfected into said cell, and a transfection-enhancing agent selected from the group consisting of an enveloped virus, a membrane virus, a viral component, and a non-viral fusogenic compound.
34. A transfection kit which comprises one or more compounds of claim [65] 12.
73. The lipophilic polyamino acid of claim 67 wherein the A₁ and A₂ groups are alkyl groups having from about 12 to about 22 carbon atoms.